Corrections to "A Continuum Model of the Dynamics of Coupled Oscillator Arrays for Phase-Shifterless Beam Scanning"

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In the above paper¹, the normalized u_0 eigenfunction in equation (17) should not have the factor of $\sqrt{2}$ in the numerator. All the other u_n and v_m eigenfunctions are correct as shown. This means that equation (23) should read

$$\widetilde{G}(x, x'; s) = \sum_{n=0}^{\infty} \eta_{n0} \frac{\cosh(x'\sqrt{s_n})\cosh(x\sqrt{s_n})}{(2a+1)(s_n - s)}$$
$$-\sum_{m=0}^{\infty} \frac{2\sinh(x'\sqrt{s_m})\sinh(x\sqrt{s_m})}{(2a+1)(s_m - s)}$$

where $\eta_{ij} = 2$ for $i \neq j$ and 1 for i = j. Similarly, this η factor should also replace the factor of 2 in the first summation of equation (24). Also, the lower limit on the third summation in equation (25) and that in the first summation of equation (26) should be 1 instead of 0. Finally the trigonometric functions in the second summation of equation (26) should be sines instead of cosines.

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¹ R. J. Pogorzelski, P. F. Maccarini, and R. A. York, IEEE Trans. Microwave Theory Tech., Vol. 47, pp. 463-470, April 1999.